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EXAMINER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/599,946	HABASSI ET AL.	
	Examiner	Art Unit	
	JANE L. STANLEY	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 January 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *26-29,31-34,36-47,49,50 and 52-61* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *26-29,31-34,36-47,49,50 and 52-61* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Applicant's response and request for continued examination, filed **21 January 2009** have been fully considered. **Claims 26-29, 31-34, 36-47, 49-50 and 52-61** are pending: **claims 26-29, 31-34, 36, 46-47, 50, 53 and 60** are amended, **claims 30, 35, 48, 51 and 62** are cancelled, and **claims 37-45, 49, 54-59 and 61** are as previously presented.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 49-50 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims recite the term "the additional compound" and it is unclear if this is in reference to the "at least another component selected from" components C or D of claim 26, or if this is in reference to component D only of claim 26, which is recited as "being at least one additional compound...". For the purpose of this office action the claims have been interpreted to mean the latter due to the antecedent basis of "at least one additional compound" recited in claim 26. Appropriate correction is requested.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 26-29, 31-34, 36-47 and 49-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Machac et al. (US 6,608,012) in view of Joye et al. (US 5,916,860).

Regarding claims 26-29, 31-34 and 36-47, Machac et al. teaches a cleaning solution comprising 0.1 to 90% by weight of mono esters or cyclic esters i.e. butyrolactone (component A) (col 2 ln 50-51 and 60-61, 65-67) and 0.1 to 10% by weight of non-ionic surfactants i.e. ethoxylated or propoxylated alkyl phenols (component B) (col 4 ln 30, 33 and 40-41) (this overlaps with and makes obvious the instantly claimed range of 1 to 10% by weight of surfactant). Machac et al. further teaches from 0 to about 90 percent of an alcohol i.e. benzyl alcohol (Component C) (col 3 ln 55-60).

Machac et al. does not specifically teach the degree of ethoxylation/propoxylation or the number of carbons in the alkyl chain. Joye et al. teaches a cleaning solution comprising γ-butyrolactone (col 4 ln 11-15) and 0.1 to 10% by weight of an ethoxylated or propoxylated alkylphenol non-ionic surfactant (col 2 ln 54-59) with 1 or 2 linear or branched alkyl groups of 4 to 12 carbons (col 3 ln 41-44) and the number of OE and/or OP units between 2 and 50 (col 3 ln 10-11) i.e. nonylphenol ethoxylated with 9 OE units

(col 3 ln 61). Joye et al. and Machac et al. are analogous art because they are concerned with the same field of endeavor, namely cleaning solutions comprising lactones and ethoxylated or propoxylated alkyl phenol non-ionic surfactants. At the time of the invention a person having ordinary skill in the art would have found it obvious to use the *ethoxylated alkyl phenol non-ionic surfactant* of Joye et al. in the composition of Machac et al. and would have been motivated to do so to use a surfactant that renders the composition miscible (Machac et al. col 4 ln 39), facilitates rinsing with water on the substrate to be cleaned, accelerates the cleaning action (Joye et al. col 2 ln 60-63), and has the right amount of alkoxylation to obtain the desired HLB value (Joye et al. col 3 ln 6-9).

Joye et al does not directly teach that the surfactant has an HLB value of from 8 to 15, however Joye does teach as the non-ionic surfactant nonylphenol with 9EO which is a compound of instant formula I wherein $(R_1)_{n''}$ is a nonyl alkyl group, wherein X is an -O- link and Y is $(RO)_jH$ with R = ethyl and j= 9. Furthermore, as Joye et al. teaches the ethoxylated or propoxylated alkylphenol with 1 or 2 linear or branched alkyl groups of 4 to 12 carbons, especially nonyl (col 3 ln 41-44), and a number of OE and/or OP of 2 to 50 (col 3 ln 10-11), it is implicit that the nonionic surfactants of Joye et al., especially nonylphenol with 9OE units (col 3 ln 61), would have this property (the surfactant of Joye et al. overlaps the following ranges: R_1 from 5 to 15, from 7 to 15 carbons; n" equal to one; j from 2 to 20, 4 to 15 and 6-12; R having 2 carbons; R'_1 having C_5-C_{10} alkyl moiety; j' from 5 to 10; and figure NP9).

Further regarding ***claims 27-29***, Machac et al. teaches 0.1 to 90% by weight of mono esters or cyclic esters i.e. butyrolactone (component A) (col 2 ln 50-51 and 60-61, 65-67) which overlaps with and makes obvious the instantly claimed ranges of more than 50% by weight, at least 60% by weight, at least 70% by weight, and at least 80% by weight lactone. Alternatively, the amount of lactone is a result-effective variable that could be optimized. At the time of the invention a person having ordinary skill in the art would have found it obvious to optimize amount of lactone and would have been motivated to do so to as Machac et al. teaches the amount of mono-ester, typically present from about 0.1 to about 90 wt% (col 2 ln 65-67), may vary widely in practice (col 2 ln 65-66). Furthermore, by teaching a range including about 90wt% Machac et al. suggests that high amounts of lactone would be useful in cleaning compositions of this type and one of ordinary skill in the art appraised of such a situation would be motivated to optimize the lactone without undue experimentation, in the absence of unexpected results (See *In re Aller*, 105 USPQ 233; see also MPEP 2144.05; see also See *In re Boesch* and *Slaney*, 205 USPQ 215).

Regarding claims 49-50, Machac et al. in view of Joye et al. makes obvious the cleaning solution as set forth above. As noted above, the "additional compound" of the instant claims has been interpreted as being directed to component D of claim 26, which is not required. Claims 49-50 are rejected as being dependent from component D and directed to a non-required component.

Claims 53-55, 57-58 and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Machac et al. (US 6,608,012) in view of Joye et al. (US 5,916,860).

Machac et al. and Joye et al. make obvious the cleaning solution as set forth in **claim 26** above.

Machac et al. further teaches a method for removing coatings such as paint (organic material soil) (col 1 ln 31-32) by dipping the composition onto the surface (col 1 ln 41; col 5 ln 20-23) under heated conditions i.e. about 45 °C to about 75 °C (col 1 ln 42; col 5 ln 16-17), with an application time between one minute and one hour (col 5 ln 36-38). Machac et al. further teaches the coatings can be removed from automotive body panels and bumpers (col 1 ln 18-19) (a progressive geometry surface).

Machac et al. does not teach the item to be made of mineral glass. However, Joye et al. teaches a method for cleaning and/or stripping plastic resins from glass supports (col 5 lns 11) i.e. glass disks soiled with cross-linked plastic resins (col 5 ln 12), by immersing the object to be cleaned into the formulation with a contact temperature of from 5 °C to 50 °C for from 1 to 60 min (col 4 ln 26-32). Joye et al. further teaches the objects/surfaces to be cleaned include plastic materials and inorganic glasses (col 4 ln 24-25). Joye et al. and Machac et al. are analogous art because they are concerned with the same field of endeavor, namely methods of removing coatings from surfaces with dipping and heating. At the time of the invention a person having ordinary skill in the art would have found it obvious to include the method of Joye et al. in the method of Machac et al. and would have been motivated to do so to

clean oils and greases and to strip paint and plastic resins from many different substrate types (Joye et al. col 4 ln 19-25).

Claim 52 is rejected under 35 U.S.C. 103(a) as being unpatentable over Machac et al. (US 6,608,012) in view of Joye et al. (US 5,916,860) as applied to **claim 26** above, and further in view of Wilkins et al. (US 5,215,675).

Machac et al. in view of Joye et al. make obvious the composition as set forth in **claim 26** above.

Machac et al. is silent as to the pH of the composition. Wilkins et al. teaches aqueous stripping solutions comprising butyrolactone (col 2 ln 7-9) and surfactants including ethoxylated or propoxylated alkyl phenols (col 2 ln 54-55 and 66-68), and solvents (col 3, ln 49-63) wherein the compositions have a pH of from 3 to 4.5 (col 4 ln 11). Wilkins et al. and Machac et al are analogous art because they are concerned with the same field of endeavor, namely surface coating removing compositions comprising surfactants, solvents and butyrolactone. At the time of the invention a person having ordinary skill in the art would have found it obvious to maintain the pH of between 3 to 4.5 of Wilkins et al. in the composition of Machac et al. and would have been motivated to do so in order to minimize corrosive effects on metals and decrease the rate of ester hydrolysis while increasing the life of the composition (Wilkins et al. col 4 ln 10-15).

Claims 56 and 59-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Machac et al. (US No. 6,608,012) in view of Joye et al. (US No. 5,916,860) as applied to **claim 26** above, and further in view of Stewart et al. (US No. 6,432,544).

Machac et al. and Joye et al. make obvious the cleaning solution as set forth in **claim 26** above.

Machac et al. does not teach the method wherein the item is a mold for optical lenses or an ophthalmic lens nor does Machac et al. teach the method further comprising the step of treating the surface with a basic aqueous solution.

Stewart et al. teaches cleaning ophthalmic lens (col 18 ln 2-4) blanks with a detergent followed by immersion of the blanks into an aqueous potassium hydroxide solution having a normality of about 2.4 and at a temperature 50 °C (col 26 ln 18-23). Stewart et al. further teaches that is it typical to treat the surface of the substrate prior to coating. Stewart et al. and Machac et al. are analogous art because they are concerned with the same field of endeavor, namely substrate stripping/cleaning. At the time of the invention a person having ordinary skill in the art would have found it obvious to use the method of Stewart et al. in the method of Machac et al. and would have been motivated to do so to clean the surface and promote adhesion of subsequently applied coating (Stewart et al. col 16 ln 14-17).

Response to Arguments

Claims 26-29, 31-34, 36-47, 49-50 and 52-61 are pending: **claims 26-29, 31-34, 36, 46-47, 50, 53 and 60** are amended, **claims 30, 35, 48, 51 and 62** are cancelled, and **claims 37-45, 49, 54-59 and 61** are as previously presented.

The objections to **claims 27-29, 35, 46 and 51** are withdrawn as a result of Applicant's amendments to the claims.

The 112, second paragraph, rejections of **claim 34, 41 and 60** are withdrawn as a result of Applicant's amendments to the claims.

The 35 U.S.C. 102(b) rejection of **claim 62** as anticipated by Matsumoto (JP 04068095) is withdrawn as a result of Applicant's cancellation of the claim.

The 35 U.S.C. 103(a) rejection of **claims 26 and 52** as unpatentable over Wilkins et al. (US 5,215,675) in view of Suwala et al. (US 4,812,255) is withdrawn as a result of the amendments to **claim 26**. Furthermore, Applicant's arguments are moot in view of the new grounds of rejection of **claim 52** as set forth above.

The 35 U.S.C. 103(a) rejection of **claims 48-51** as unpatentable over Machac et al. (US 6,608,012) in view of Joye et al. (US 5,916,860) and further in view of Nakayama (US 6,423,150) is withdrawn as a result of the amendments to **claim 26** and the cancellation of **claim 48**. Furthermore, Applicant's arguments are moot in view of the new grounds of rejection of **claims 49-50** as set forth above

In general, it is worth pointing out that as the instant claims use "comprising" which represents open claim language and is an inclusive or open-ended transitional

term that does not exclude additional, unrecited elements or method steps (MPEP 2111.02). Therefore the arts of record used in the above/previous rejections may contain other components without negating or detracting from the obviousness of the rejections as asserted by Applicants. Furthermore, as Applicant use "comprising" the assertion that the instant invention "may be defined as a cleaning solution that *does not require* these additional ingredients" (see Arguments page 25) is moot. The claim language of the instant invention does not explicitly exclude "additional ingredients". This includes, for example the "a carbonate and a mono-ester (Machac); a carbonate and a pyrrolidone (Machac); or a dibasic ester (Joye)" (Arguments page 16) or the "water and a peroxide or an acid activator" of Wilkins (Arguments page 23) or the "organic acid" of Suwala (Arguments page 24) etc (Arguments page 25).

Applicant's arguments regarding the 35 U.S.C. 103(a) rejections of **claims 26-47** (directed to the cleaning solution) and of **claims 53-55, 57-58 and 61** (directed to the process for cleaning) as unpatentable over Machac et al. (US 6,608,012) in view of Joye et al. (US 5,916,860) have been fully considered but they are not persuasive.

Regarding argument **1** sections **(b)-(c) and (i)** (Arguments, page 11 and page 14): Machac et al. teaches a mono-ester which includes the compound butyrolactone. Machac et al. suggests that butyrolactone is useful in the cleaning compositions and it would therefore be obvious to one of ordinary skill to select the butyrolactone of Machac et al. with a reasonable expectation of success. Furthermore, Machac et al. broadly teaches that the mono-ester can be present typically from about 0.1 to 90 wt% of the

composition, which overlaps with the instantly claimed ranges of more than 50% by weight, at least 60% by weight, at least 70% by weight, and at least 80% by weight. While Machac et al. does not teach specific examples with the mono-ester present at greater than 50wt%, one of ordinary skill in the art appraised of the broad teaching of Machac et al., would have been able to optimize the amount of mono-ester without undue experimentation, in the absence of unexpected results (MPEP 2144.05).

Regarding argument **1** sections **(d)-(i)** (Arguments, page 12-14): Joye et al. is/was relied upon to teach that in compositions that comprise butyrolactone and an ethoxylated or propoxylated alkylphenol non-ionic surfactant, such as those taught by Machac et al. (Machac et al.: col 2 ln 50-51, 60-61, 65-67; col 4 ln 30, 33, 40-41), it is known to use said non-ionic surfactants with a number of ethoxylation/propoxylation units of between 2 and 50 (Joye et al. col 3 ln 10-11) in order to include a surfactant with the desired HLB value (see rejection as set forth above). Joye et al. was not relied upon to alter the amount of butyrolactone as taught by Machac et al, as repeatedly and incorrectly assumed by Applicant, and does not constitute teaching away from the amount of mono-ester taught by Machac et al.. Furthermore, as Joye et al. teaches that polar aprotic solvents such as butyrolactone are useful and may be included in the cleaning compositions, it would have been obvious to one of ordinary skill in the art to do so. The cited reference does not have to teach each component as "required" in order to render the use of said component obvious in the compositions of the prior art.

Furthermore, as set forth in the rejections, both previously and above, Joye et al. was used to modify Machac et al. At no point was Machac et al. used to modify Joye et

al. as incorrectly stated by Applicant's (Arguments page 15). It is also noted that the motivation for combining Machac et al. with Joye et al. as set forth both above and previously is as follows: "At the time of the invention a person having ordinary skill in the art would have found it obvious to use the ethoxylated alkyl phenol non-ionic surfactant *of Joye et al. in the composition of Machac et al.* and would have been motivated to do so to use a surfactant that renders the composition miscible (Machac et al. col 4 ln 39), facilitates rinsing with water on the substrate to be cleaned, accelerates the cleaning action (Joye et al. col 2 ln 60-63), and has the right amount of alkoxylation to obtain the desired HLB value (Joye et al. col 3 ln 6-9)."

Regarding argument **1** sections **(ii)** (Arguments, page 15-16): The rejection of the claims was set forth under 35 U.S.C. 103(a) as being unpatentable over Machac et al. *in view of* Joye et al.. Machac et al. teaches the mono-ester, i.e. butyrolactone, ethoxylated or propoxylated alkyl phenol surfactants and benzyl alcohol as required by instant independent claim 26. Furthermore, Machac et al. teaches each of these components as useful in the composition and teaches respective amounts. It would be within the skill of an ordinary artisan to select the components of Machac et al. to arrive at the instant invention with a reasonable expectation of success. Joye et al. was brought in to teach the degree of propoxylation/ethoxylation of the ethoxylated or propoxylated alkyl phenol non-ionic surfactants of Machac et al. and not to alter the amount of butyrolactone. Joye et al. further teaches that such non-ionic surfactants are advantageous to include for the purpose of facilitating rinsing with water of the compositions on the substrate to be cleaned and in some cases to accelerate the

cleaning action (Joye et al. col 2 ln 59-63) and further teaches specific examples wherein nonylphenol 9 OE is preferably used (Joye et al. col 4 ln 41-50; col 5 ln 1-6; see also col 6 claim 5-6) and suggests butyrolactone is among the preferred co-solvents that may be combined with the non-ionic surfactants (Joye et al. col 6 claim 8-9).

It is noted that Applicant's arguments towards the combination of Machac et al. in view of Joye et al. were all directed to the composition claims and that the rejection of the method claims was not argued/discussed.

Applicant's arguments regarding the 35 U.S.C. 103(a) rejection of **claims 26-47** as unpatentable over Machac et al. (US 6,608,012) in view of Joye et al. (US 5,916,860) and further in view of Stewart et al. (US 6,432,544) have been fully considered but they are not persuasive.

Regarding argument **3** section **(c)** (see page 20), Applicants state "Stewart regards cleaning substrate surfaces in order to allow for good adhesion of a coating composition, and not the surfaces of molds, much less the surfaces of glass molds, as presently claimed". The Examiner notes that the "substrates" of Stewart are ophthalmic lens blanks (col 18 ln 2-4; col 26 Example 12 part A), and the "coating compositions" of Stewart are used to form ophthalmic lenses (col 1 ln 21-24). Furthermore, it is noted that the instant claims *do not* require the molds to be specifically "glass molds".

Regarding Applicant's arguments to the above combination of references (Arguments, Argument **3**, section **(d)** page 20-21), Applicant states "the cleaning Stewart refers to regards cleaning a substrate prior to application of a coating

composition. By contrast the claimed invention regards a cleaning process of a soiled item that is a mold for optical or ophthalmic lenses...One of skill in the art looking to clean a mold would not look to see how others clean substrates onto which a coating composition is to be placed, as that is not a function of the claimed mold." The Examiner again notes that the "substrates" of Stewart are ophthalmic lens blanks (col 18 ln 2-4; col 26 Example 12 part A), and the "coating compositions" of Stewart are used to form ophthalmic lenses (col 1 ln 21-24). As both the instant claims and Stewart are directed to cleaning ophthalmic lens molds, it is unclear how they are non-analogous fields, as per Applicant's assertion (Arguments page 21).

Furthermore, as stated in the previous office action, Stewart and Machac are analogous art because they are concerned with the same field of endeavor, namely substrate stripping/cleaning.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JANE L. STANLEY whose telephone number is (571)270-3870. The examiner can normally be reached on Monday-Thursday, 7:30 am - 5 pm, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on (571) 272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Mark Eashoo/ /JLS/
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